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QUALITY ASSURANCE REPORT/QUALITY CONTROL REPORT

		EE/QA/PR/ 06 /2023-24, DATE: 22/09/2023
Name of Work	:	Improvements to drain all-round the parks at Bagalgunte ward no;14 Dasarahalli zone. Estimated cost 140.00 Lakhs
Job Code	:	014-20-000052
Bill No. & Amount	:	**1st & Final Bill. Rs. 1,41,12,993.29 (Including GST)**
Name of Agency	:	**Sri. H Murthy**
Type of Test Performed	:	Rebound Hammer Test as per IS13311-(2)-1992
Materials on which Tests Was Performed	:	1. RCC Drain Wall (M20) 2. Precast Cover Slab (M15) 3. Kerb stone (M15)
Officers present during inspection	:	1. Sri. Venkateshappa AE – Ward no 14 2. Sri Jayaraju.K.S AEE-Quality Assurance
Project Management Consultants	:	**Newzen Consultant**
Observations	:	➢ NDT (Rebound hammer test) Test was conducted by Project Management Consultants at random locations in presence of AE (Ward No 14) along with AEE –QA. ➢ The Rebound Hammer Test was conducted randomly on RCC Drain Wall (M20), Precast cover slab (M15), Kerb stone (M15) The readings and results are recorded by the PMC consultants. ➢ The readings of Rebound Hammer Test results are tabulated and analysis of test results done by PMC is here by furnished. ➢ The location wise test results are reproduced in the tables shown below.
Test Locations	:	Location 1 : Near BWSSB Park Kirloskar Layout (Anjaneya Temple Park) Location 2 : Near park Kirloskar layout opp to BWSSB Location 3 : Anjaneya temple gate 3rd main Kirloskar layout near BWSSB Tank Location 4 : Kirloskar layout park part 1 Location 5 : Kirloskar layout park part 4 Location 6 : Hesarghatta Main road park MEI Layout

4.9.2023

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ಉಪ-ವಿಭಾಗ
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ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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Table-01: Rebound Hammer Test Results for Location 01

Sl. No.	Member	Rebound Hammer Number	Average reading	Compressive Strength (N/mm²)	Impact Direction
Near BWSSB Park Kirloskar Layout (Anjaneya Temple Park)					
1	Precast cover slab (M15)	28	22.33	18	Vertical down
2		26			
3		26			
4		24			
5		24			
6		26			
1	Kerb stone (M15)	28	26.33	18	Horizontal
2		26			
3		26			
4		28			
5		26			
6		24			

Table-02: Rebound Hammer Test Results for Location 02

Sl. No.	Member	Rebound Hammer Number	Average reading	Compressive Strength (N/mm²)	Impact Direction
Near park Kirloskar layout opp to BWSSB					
1	Precast cover slab (M15)	20	21.66	18	Vertical down
2		20			
3		22			
4		20			
5		22			
6		26			
1	Kerb stone (M15)	24	24.66	16	Horizontal
2		24			
3		24			
4		26			
5		26			
6		24			
1	RCC Drain wall (M20)	28	28.3	22	Horizontal
2		28			
3		28			
4		26			
5		28			
6		26			

Table-03: Rebound Hammer Test Results for Location 03

Sl. No.	Member	Rebound Hammer Number	Average reading	Compressive Strength (N/mm²)	Impact Direction
Anjaneya temple gate 3rd main Kirloskar layout near BWSSB Tank					
1	Precast cover slab (M15)	24	26.66	24	Vertical down
2		28			
3		28			
4		26			
5		28			
6		26			

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Improvement to drain alignment in between the houses at Bagalgunte ward no; 14 Dasarahalli zone.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ಉಪ-ವಿಭಾಗ – ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

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1	Kerb stone (M15)	24	24	17	Horizontal
2		24			
3		24			
4		24			
5		22			
6		26			
1	RCC Drain wall (M20)	30	28.66	22	Horizontal
2		26			
3		28			
4		28			
5		30			
6		28			

Table-04: Rebound Hammer Test Results for Location 04

Sl. No.	Member	Rebound Hammer Number	Average reading	Compressive Strength (N/mm^2)	Impact Direction
Kirloskar layout park part 1					
1	Precast cover slab (M15)	22	23	20	Vertical down
2		24			
3		22			
4		20			
5		26			
6		24			
1	Kerb stone (M15)	24	25.66	18	Horizontal
2		28			
3		26			
4		24			
5		26			
6		26			
1	RCC Drain wall (M20)	28	28.33	22	Horizontal
2		26			
3		30			
4		30			
5		28			
6		28			

Table-05: Rebound Hammer Test Results for Location 05

Sl. No.	Member	Rebound Hammer Number	Average reading	Compressive Strength (N/mm^2)	Impact Direction
Kirloskar layout park part 4					
1	Precast cover slab (M15)	22	23	20	Vertical down
2		24			
3		24			
4		22			
5		22			
6		24			
1	Kerb stone (M15)	24	25	17	Horizontal
2		24			
3		26			
4		24			
5		26			
6		26			

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

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1	RCC Drain wall (M20)	30	28.66	22	Horizontal
2		30			
3		30			
4		28			
5		26			
6		28			

Table-06: Rebound Hammer Test Results for Location 06

Sl. No.	Member	Rebound Hammer Number	Average reading	Compressive Strength (N/mm^2)	Impact Direction
Hesarghatta Main road park MEI Layout					
1	Precast cover slab (M15)	22	23.66	20	Vertical down
2		24			
3		22			
4		24			
5		26			
6		24			
1	Kerb stone (M15)	24	25.66	18	Horizontal
2		28			
3		26			
4		24			
5		26			
6		26			
1	RCC Drain wall (M20)	28	28	22	Horizontal
2		28			
3		28			
4		28			
5		30			
6		26			

Conclusion:

The file containing **1st & Final bill** has been submitted for the above work to QA department on 24.04.2023 requesting for spot inspection. Engineers of QA/QC division have visited the work spot on 19.05.2023

PMC team was instructed to assess the strength of concrete used for RCC Drain Wall (M20), Precast cover slab (M15), Kerb stone (M15) by NDT (Rebound hammer test) Test. The respective tests were conducted by PMC in presence of engineer in charge of work.

From the test results furnished by PMC consultants, it is concluded that the results of the samples collected are in accordance with the standards/ specifications mention in the BIS codes. However, the results submitted by the PMC have been reproduced here with for further needful action. The results checked by QA/QC relates only for item tested in the particular location randomly.

Further, QA/QC directs the PMC and Engineer in-charge of the work that all materials used for the work shall be inspected, tested and accepted as per the relevant specifications before incorporation in the work. The frequencies and methods of sampling and testing materials, including those required for definite purpose and not covered by MORT&H specifications shall be in accordance to the relevant IRC or BIS or AASHTO/ASTM/BS standards in order of priority.

All materials or work not conforming to the requirements of the specifications shall be considered unacceptable and rejected. The unacceptable materials or works that are rejected shall be immediately removed unless the defects are corrected and approved by the engineer in-charge of work..

The concerned Engineer in charge of the work shall follow the direction issued by Chief Commissioner Letter number dated 01.08.2022 and 14.09.2022 and take necessary action as appropriate in accordance with the law.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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Note: -

This report by QA/QC is pertaining to the work carried out in **1st & Final bill** only.

Engineer in charge of work shall display details of work, work code, cost of project, start and completion date, and information of Engineer in charge of work with contact numbers at work spot.

Engineer in charge of work and Agency shall ensure that if any damages or defects occur pertaining to the executed work within the Defect Liability period (DLP), The same shall be rectified immediately on top priority without fail.

Engineer in charge of work shall ensure that any changes/ modification/change in location in the sanctioned estimate to be got approved by competent authority.

4/9

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣಾಂಕಣ ಉಪ-ವಿಭಾಗ
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014-20-000052

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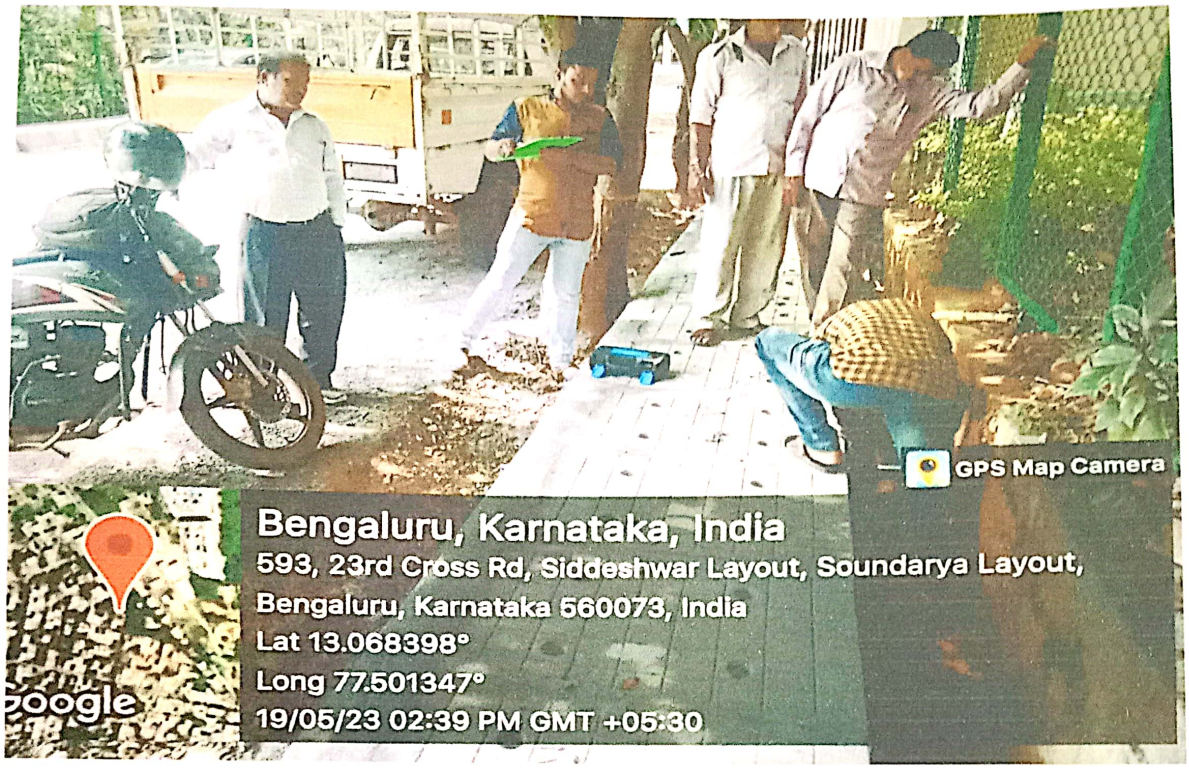
NAME of WORK :- Improvements to drain all Round the Park in ward no:-14 DASARALLI ZONE
Job:- 014 - 20 - 000052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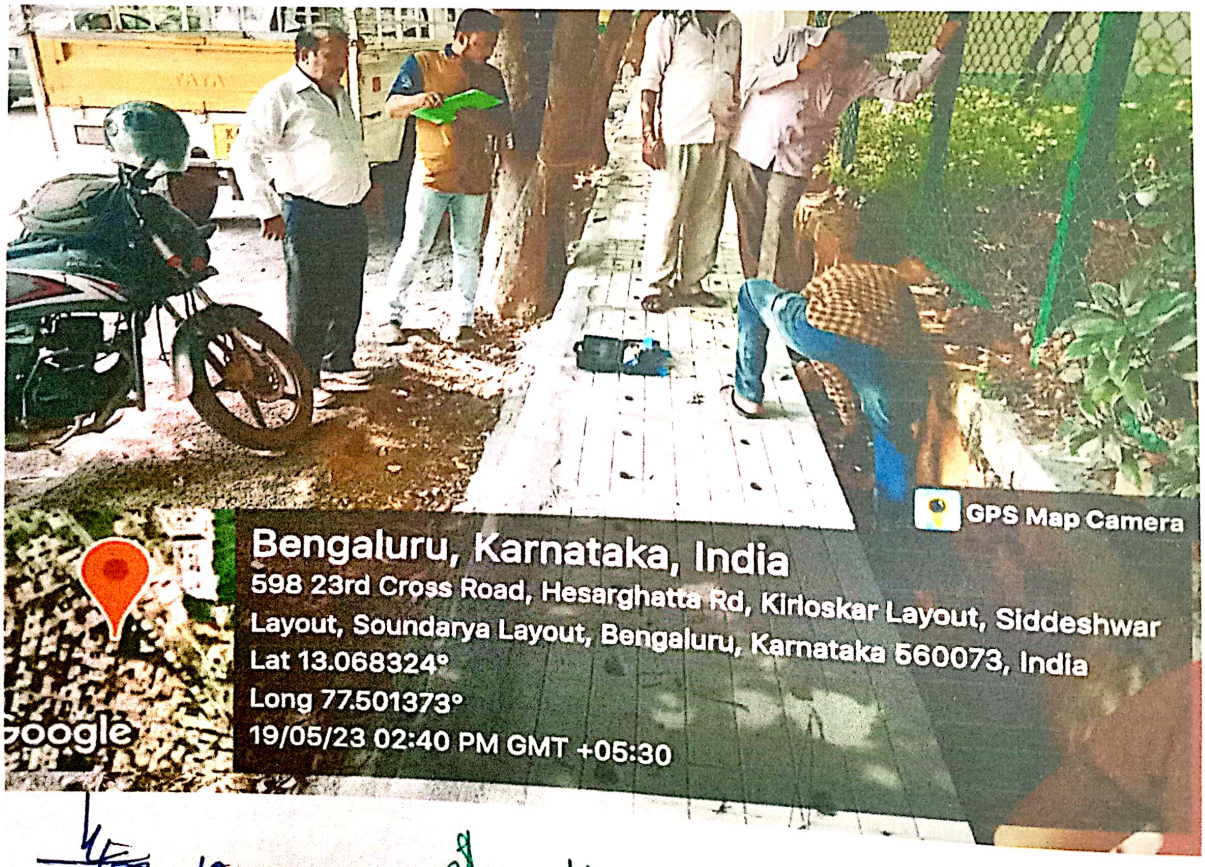
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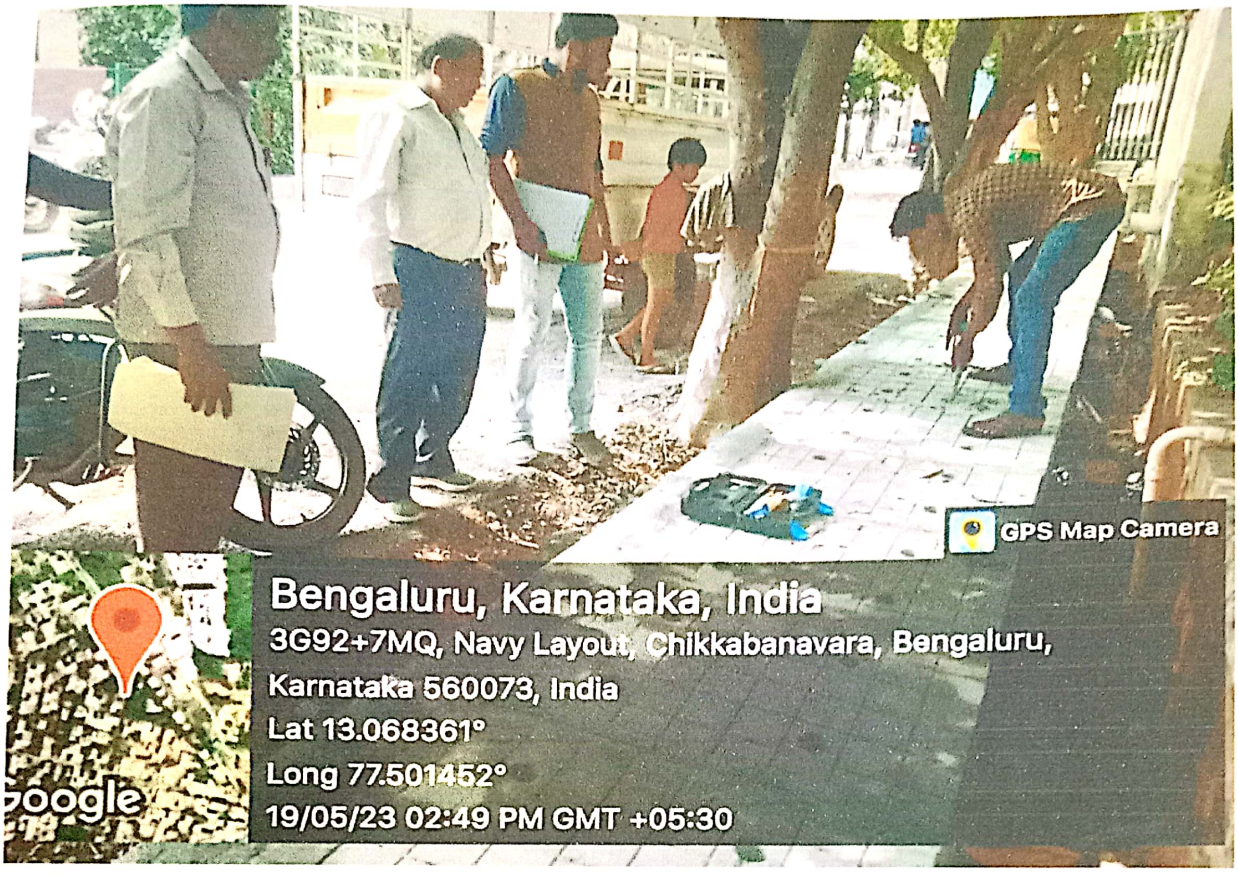
Improvements to drain all round the park at Bagalgunte ward no:14 Dasarahalli zone.

NAME of work :- IMPROVEMENTS to drain all aro
the park in ward no: 14 Dasarahalli zone

JOB :- 014 - 20 - 000052



Improvements to drain all round the park in Bagalgunte ward no;14 Dasarahalli zone.

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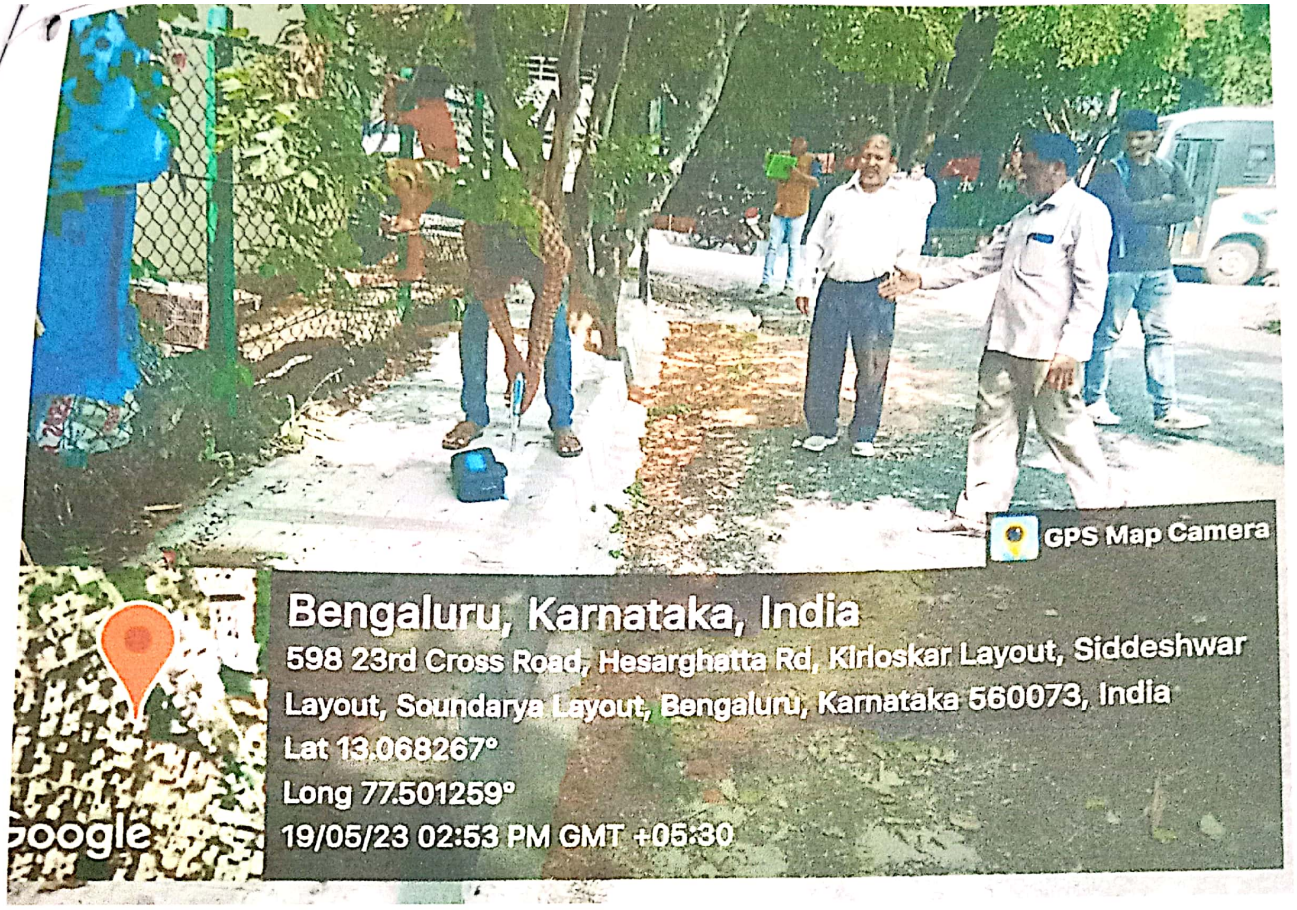

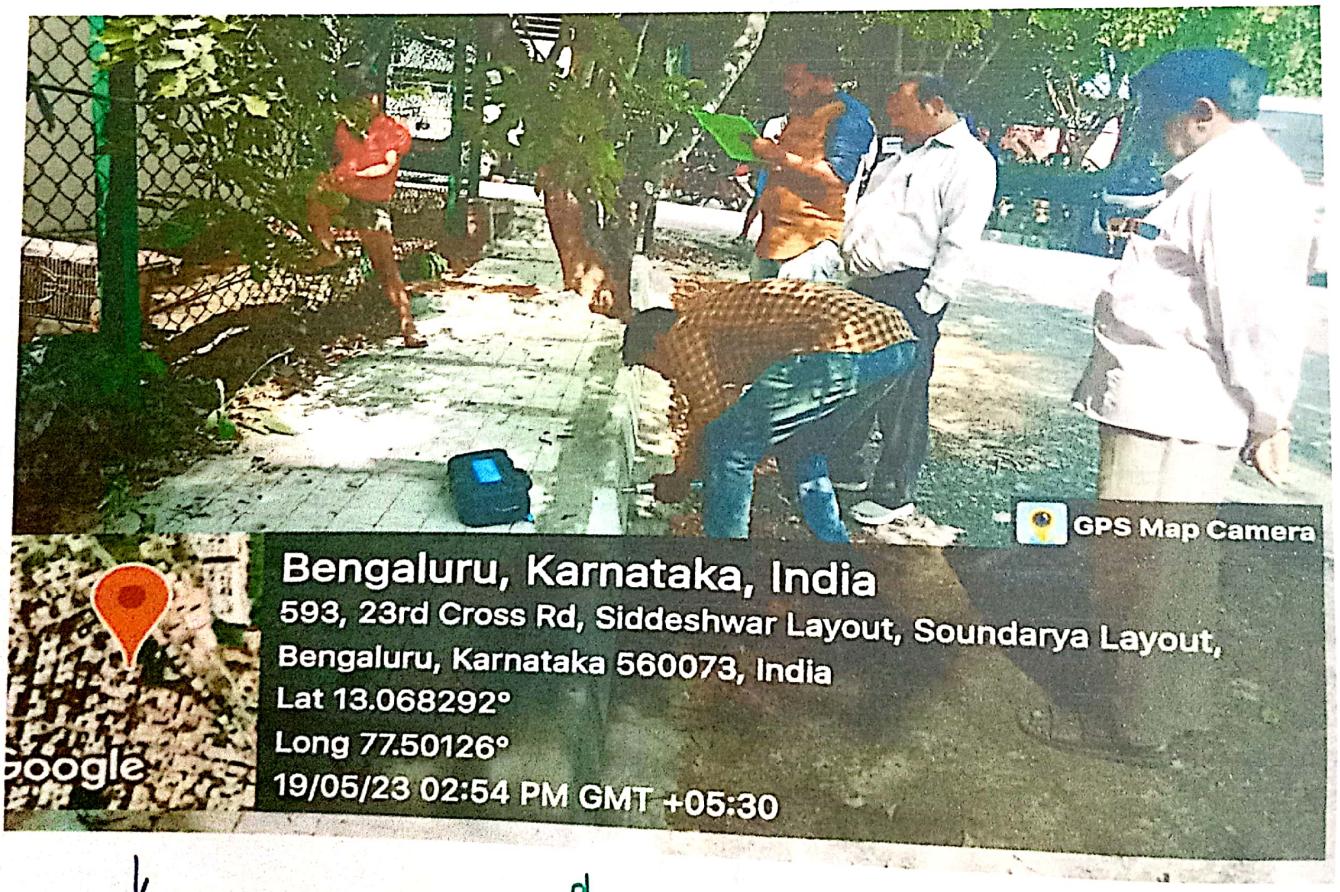

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Improvements to drain all-round the parks at Bagalgunte ward no:14 Dasarahalli zone

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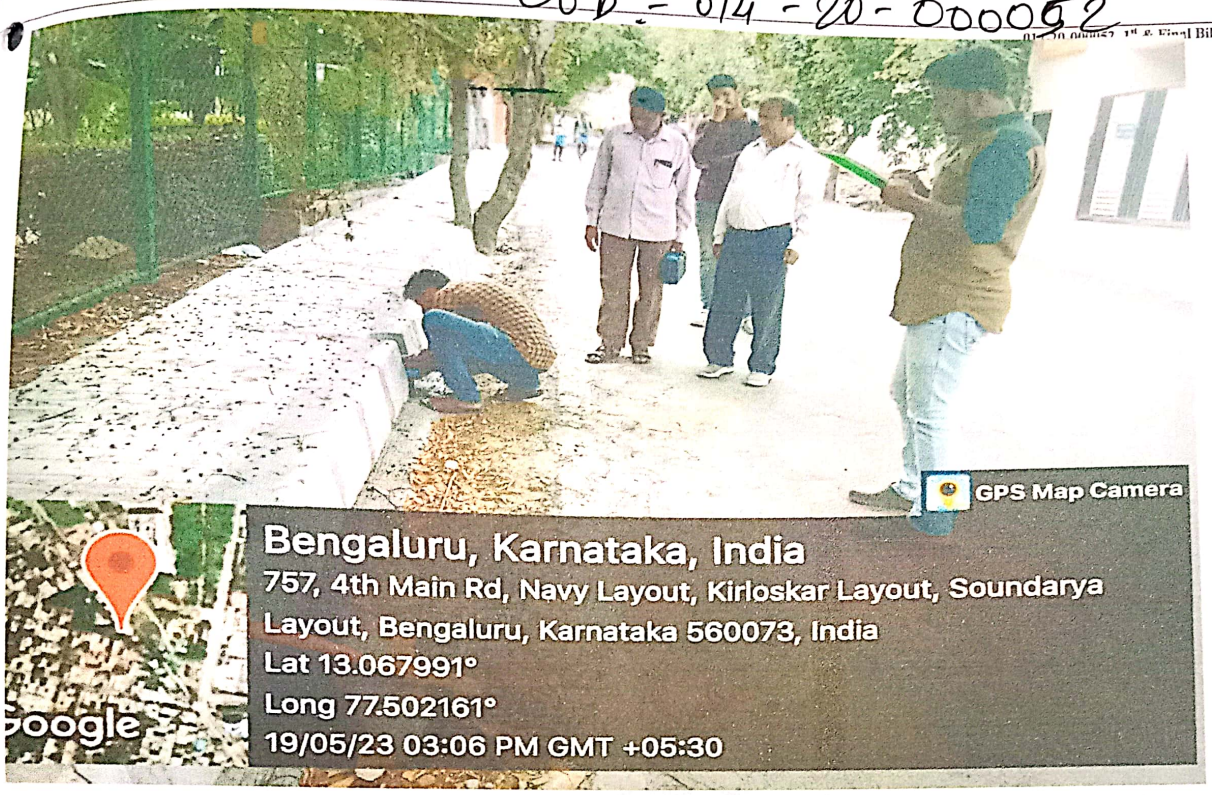
NAME of the work: IMPROMENTS to Drain all around the Parks in ward No: 14 DASARALLI ZONE
SOR:- 014-20-000052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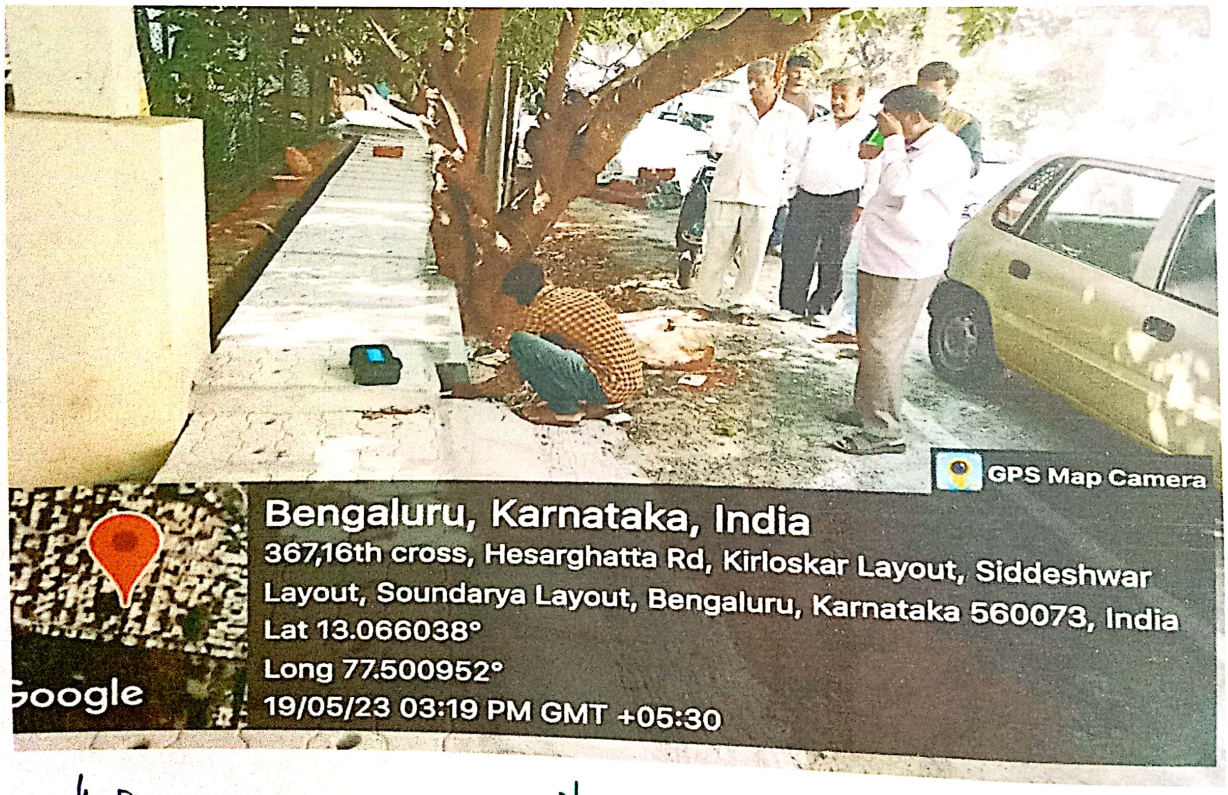
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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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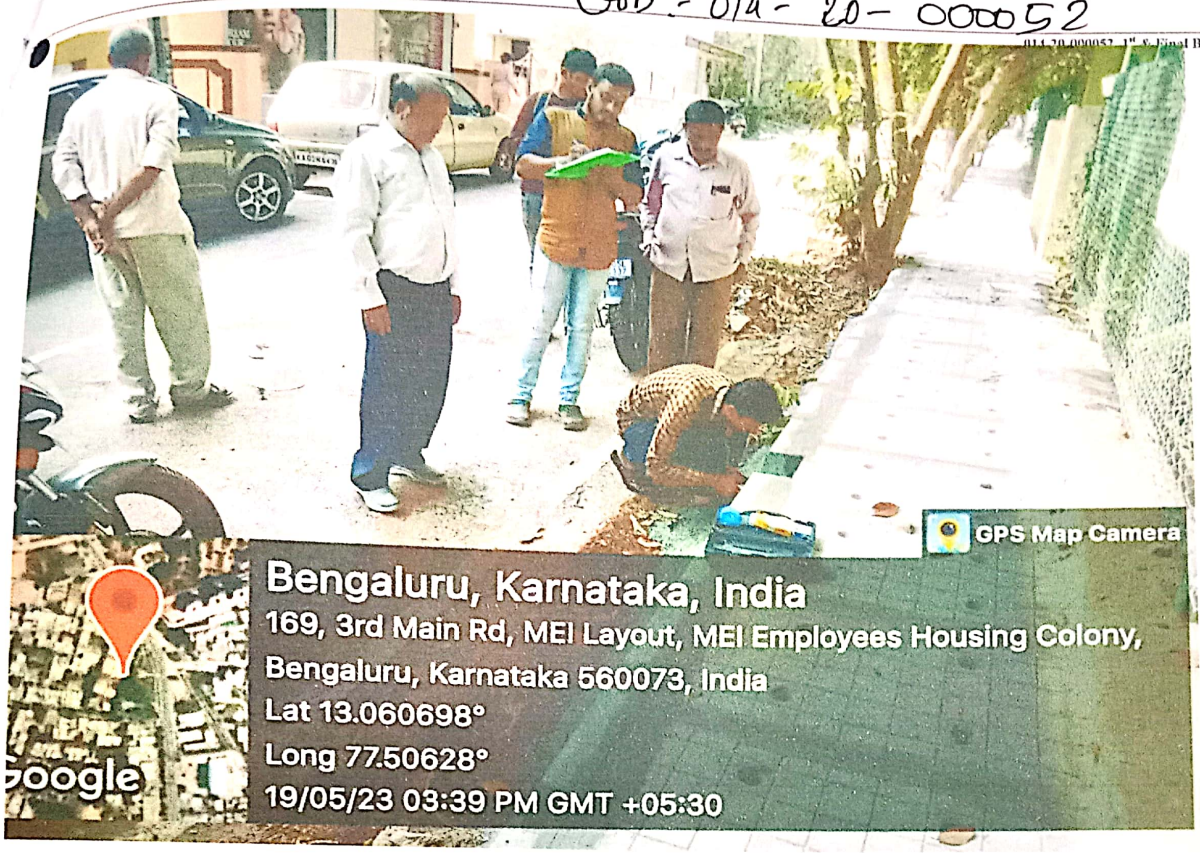
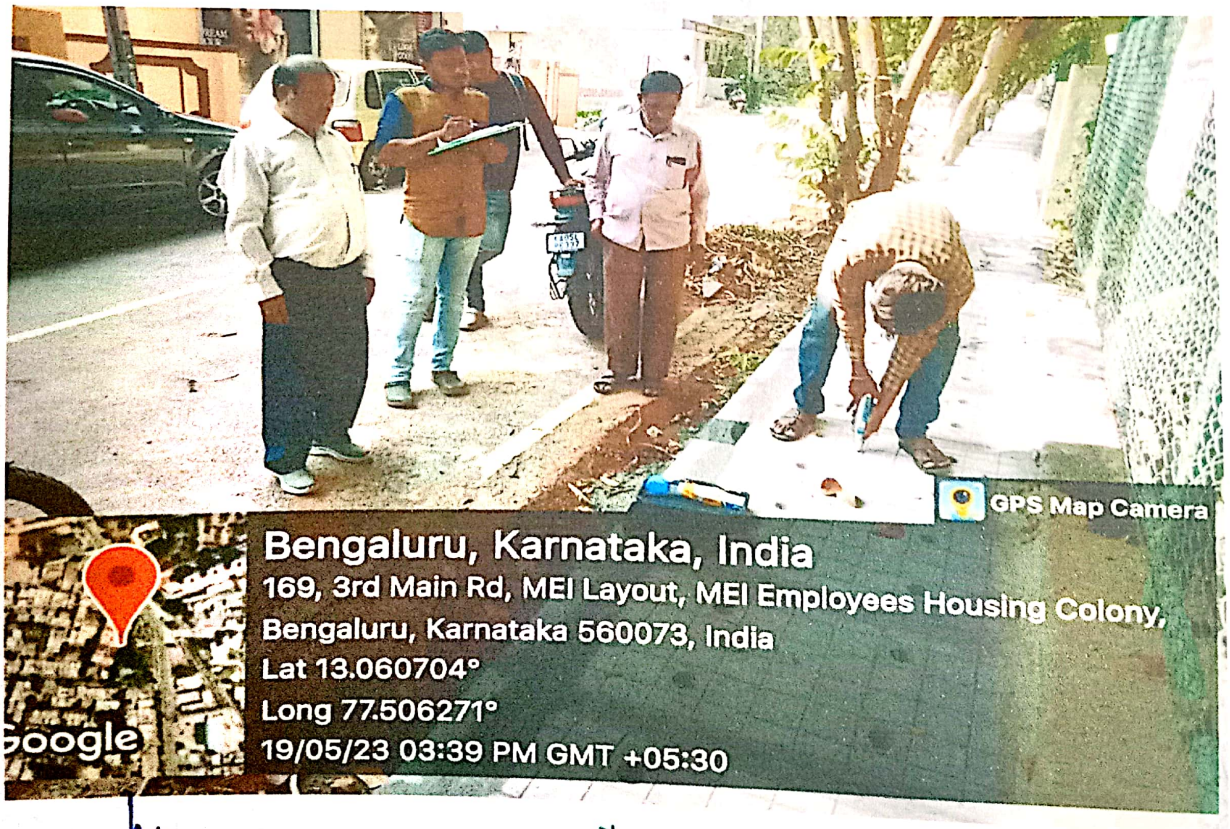
Improvements to drain all round the parks at Bagalgunte Ward no.14 Dasarahalli zone.

NAME of WORKS IMPROMENTS to Drain all around the Park in ward no 14 DASARAHALLI ZONE
1
Job :- 014 - 20 - 000052





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ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

Improvements to drain all round the parks at Bagalgunte ward no.14 Dasarahalli zone.

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